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Report to the Chairman, Committee on Governmental Affairs, U.S. Senate

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COAST GUARD

Magnitude of Alcohol Problems and Related Maritime Accidents Unknown

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Resources, Community, and
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May 24, 1990

The Honorable John Glenn
Chairman, Committee on
Governmental Affairs
United States Senate

Dear Mr. Chairman:

On April 19, 1989, you asked us to examine the Coast Guard's efforts to reduce the potential for alcohol-related accidents in the maritime industry. Every year, U.S. and foreign vessels carry billions of gallons of petroleum products and other types of hazardous cargo in and out of U.S. ports. One or more accidents involving these vessels could cause millions of dollars in environmental and economic damages. Because alcohol abuse could be a contributing factor in such accidents, the Congress, in the Coast Guard Authorization Act of 1984, required the Coast Guard to establish intoxication regulations for the maritime industry.

As agreed with your office, we examined the Coast Guard's (1) procedures to screen merchant mariner applicants for alcohol abusers and (2) readiness to enforce intoxication regulations by testing for alcohol use on board vessels. You also asked us to identify the number of applications that were rejected because of alcohol abuse and the number of maritime accidents in which alcohol use was a contributing factor. In addition, we are providing a brief comparison of the Coast Guard's screening procedures and regulations with those of the Federal Aviation Administration (FAA) and the Federal Railroad Administration (FRA), as requested.

Results in Brief

We found the following weaknesses in the Coast Guard's efforts to reduce alcohol problems on commercial vessels.

- The documentation and licensing process—which, among other things, allows the Coast Guard to screen applicants for alcohol problems—is limited because of gaps in the Coast Guard's legislative authority and insufficient procedures for collecting and verifying relevant information during the application-screening process.
- The Coast Guard's readiness to enforce intoxication regulations by testing for alcohol use on board vessels is limited because officers do not have the training or equipment to administer intoxication tests upon arrival at a marine accident.

- No reporting system capability exists to provide information on the number of merchant mariner applications rejected because of alcohol abuse, the number of marine accidents in which alcohol use was a contributing cause, or other data on alcohol problems in the maritime industry. Without this information, the Coast Guard does not know the magnitude of alcohol problems in the maritime industry or the impact its efforts have had on reducing the potential for alcohol-related accidents.

Background

As part of its marine safety responsibilities, the Coast Guard documents and licenses all persons employed on U.S. commercial vessels to ensure they have the necessary skills, physical condition, and experience to operate vessels safely. The Coast Guard issues three types of official working papers—documents, licenses, and certificates. Merchant mariner documents, essentially identification papers, are required for all persons employed on U.S. commercial vessels and are valid for life. This is the only paper the lowest-grade mariner requires, but it can be upgraded, such as from ordinary seaman to helmsman, for increased responsibility. In addition to the initial document, licenses are required for officers—such as masters, mates, and engineers—and can be upgraded, but must be renewed every 5 years. Certificates are issued to specialized staff persons—such as doctors, nurses, and pursers—and, like the initial document, are valid for life. In 1987, the Coast Guard processed over 40,000 document, license, and certificate applications through its 17 regional examination centers.

The Coast Guard Authorization Act of 1984 required the Coast Guard to establish intoxication regulations for the maritime industry and to revise its marine casualty reports to include information on whether alcohol use contributed to the accident. The act also provided that individuals operating vessels while intoxicated would be liable for civil penalties or fines and/or imprisonment. The Coast Guard's regulations, which became effective on January 13, 1988, prohibit the use of alcohol during duty, or 4 hours before, and set a maximum blood alcohol concentration of .04. These regulations apply to personnel on U.S. commercial vessels worldwide and on foreign vessels in U.S. waters. FAA's and FRA's intoxication regulations are similar to the Coast Guard's in that they allow a maximum blood alcohol concentration of .04 and prohibit alcohol use during duty. However, FAA prohibits the use of alcohol 8 hours before an individual reports for work, while FRA does not impose a specific time restriction, specifying only that an individual cannot report to work intoxicated.

The Coast Guard's regulations allow employers or Coast Guard officers, at a minimum, to conduct intoxication tests if there is "reasonable cause," such as an accidental grounding, to suspect alcohol involvement. Violations are to be reported to the Coast Guard's Administrative Law Judges, who conduct hearings and decide punitive actions.

Application-Screening Procedures Do Not Exclude Alcohol Abusers

The Coast Guard's first line of defense against alcohol problems is to deny mariners who have a record of alcohol abuse the official papers they need to work on U.S. commercial vessels.[1] However, because of limitations in its legislative authority as well as weaknesses in its screening procedures, the Coast Guard believes that merchant mariners with records of alcohol abuse are being employed on U.S. commercial vessels.

The Coast Guard does not have the legislative authority to deny the initial merchant mariner document to alcohol abusers. Although the Coast Guard can suspend or revoke this document for misconduct while on duty, which includes intoxication, it can reject initial applicants only if they have a record of dangerous drug use or controlled-substance convictions. Consequently, mariners requiring only the initial document for employment are permitted to work even if they have alcohol problems. Although these individuals generally perform relatively unskilled tasks, they have additional safety-related responsibilities, such as standing watch.

The Coast Guard has the authority to deny licenses, certificates, and renewals/upgrades to applicants it finds unqualified because of "character" or "habits of life," including alcohol abuse. However, in screening applications, it has limited legislative authority regarding its verification procedures to ensure that alcohol abusers who have falsified their applications are identified. Such weaknesses in procedures would allow mariners with alcohol problems to be employed in responsible positions (e.g., as captains and mates).

For example, in identifying alcohol abusers, the only pertinent information the Coast Guard requires applicants to report is conviction information. Since the Exxon Valdez accident, it has specified that this information must include motor vehicle convictions for driving while intoxicated (DWI) or driving under the influence (DUI). However, the Coast Guard does not have the legislative authority to access the

[1] Where the Coast Guard has authority to deny applications during the screening process, it considers drunk driving convictions and/or criminal activity involving alcohol use.

National Driver Register (NDR) to verify whether applicants have a history of DWI or DUI convictions. Unlike the Coast Guard, FAA and others do have the legislative authority to access and use the NDR to verify applicant information.

In June 1989, the Secretary of Transportation, noting that the Exxon Valdez disaster had brought to light significant deficiencies in the Coast Guard's authority to administer the merchant mariner documentation and licensing activity, proposed legislation authorizing the Coast Guard to deny the initial merchant mariner document to alcohol abusers and to obtain access to the NDR. The legislation passed both houses in November 1989 and was still in conference as of April 1990.

These legislative changes will improve the Coast Guard's ability to screen alcohol abusers. However, other means the Coast Guard uses to collect and verify information can also be improved. For instance, the Coast Guard verifies the conviction information that applicants report through a Federal Bureau of Investigation (FBI) criminal check,[1] but only when the mariner first applies for the initial merchant mariner document or a license. According to Coast Guard officials, they rarely conduct FBI criminal checks when a mariner applies for upgraded licenses, upgraded documents, or license renewals because the checks are costly and take too long to complete. By contrast, FBI officials told us that in the past the FBI did not charge a fee for criminal checks, although it just began charging $14 as of January 1, 1990. Moreover, the officials said that checks generally take only a maximum of 25 days.

Furthermore, the Coast Guard does not require applicants or their physicians to report any medical problems from alcohol use. Application procedures for all working papers except the initial document require the submission of a physical examination report assessing the applicant's general physical health, hearing, and sight. The Coast Guard uses the report only to ascertain the applicant's overall fitness for service, not to identify alcohol abusers. By comparison, FAA's medical form does request information on excessive alcohol use, and in 1987 and 1988, FAA denied more than 550 pilots the right to fly because of alcohol problems reported by physicians.

[1]The NDR, maintained by the National Highway Traffic Safety Administration, is a centralized data base of problem drivers and contains data from all states (except Oklahoma) on traffic violations and convictions, including DWI and DUI convictions.

[1]The FBI, using finger print identification, checks its records for any criminal activity, including arrests and convictions for misdemeanors and felonies. These records contain the FBI's own files, as well as criminal data from all local, state, and national law enforcement agencies.

Reasonable-Cause Tests Are Not Conducted to Enforce Intoxication Regulations

The Coast Guard's revised intoxication regulations limiting alcohol use on board vessels have been in effect since January 13, 1988. However, its investigative officers are not prepared to enforce these regulations by administrating intoxication tests when there is reasonable cause because they do not have the necessary skills or equipment. Consequently, investigators may not always determine whether alcohol was a contributing factor in a marine accident, and, as a result, the mariner(s) involved may not always be identified and charged with violating the intoxication regulations.

Although the regulations provide that marine accidents, such as an accidental grounding, can provide the basis for reasonable-cause testing, the Coast Guard does not request the mariners involved in these accidents to be tested unless they show obvious signs of intoxication. According to program officials, marine employers and Coast Guard investigators have conducted only a few reasonable-cause tests since the regulations went into effect. Furthermore, the Coast Guard is not collecting information on the results of reasonable-cause tests. By comparison, FRA reported that of 1,005 railroad employees given reasonable-cause tests in 1988, 46, or 4.6 percent, had blood alcohol concentrations of .04 or greater.

According to Coast Guard officials, accident investigators are not receiving training for administering intoxication tests and do not have testing equipment. Funds were not budgeted for these purposes because the Coast Guard assigned a low priority to implementation of these regulations. Coast Guard officials told us they would be more willing to test if they were trained and if testing equipment was readily available.

Lack of Information Restricts Management Oversight

We found that the Coast Guard's marine personnel and accident casualty management information systems do not maintain the personnel, casualty, or enforcement data needed to monitor alcohol problems. Without these data, the Coast Guard does not know the true magnitude of the alcohol problem in the marine industry. Nor can it assess the results of its efforts to reduce accidents due to alcohol problems, as required by its regulations. Furthermore, without this information the Coast Guard may not make effective management decisions regarding the allocation of resources to improve such efforts.

Specifically, the Coast Guard's marine personnel information system does not maintain information on applications for licenses, certificates, and renewals/upgrades denied because of alcohol problems. According

to Coast Guard officials, the individual personnel files in the field contain information on issuances, suspensions, revocations, and denials of official working papers, but the data entered in the information system do not record the reasons for such denials. We asked the Coast Guard to question its 17 examination centers to determine how many mariners were denied licenses and certificates during the application process because of alcohol abuse. No formal data were available from any of the centers, but examining officials from two centers recalled a total of three applications having been denied.

The Coast Guard does not specifically track casualties in which alcohol was a contributing factor, even though in October 1984 the Congress required the agency to do so. Although the Coast Guard revised its casualty reports to include information on whether alcohol or drug use was involved, the data base design combines the information, leaving no way for management to retrieve casualty statistics involving just alcohol. Coast Guard officials stated that the Coast Guard is revising its information system to correct this problem.

Coast Guard headquarters also does not maintain data on the punitive actions taken by the Administrative Law Judges for violations of alcohol regulations. Although the data are available in case files retained by the judges at local sites, the results of alcohol-related cases are not collected and centralized at headquarters.

Officials from the Department of Transportation, the National Transportation Safety Board, and the Coast Guard generally agree that the maritime industry probably has an alcohol problem. However, the only statistic available was a 1989 NDR computer match by the Transportation Inspector General showing that 4,247 of 140,921 licensed merchant mariners had been reported for drunk-driving violations over a recent 3-year period.

Comparison of Coast Guard, FAA, and FRA Alcohol-Related Regulations

During the course of our review, we developed a brief comparison of Coast Guard, FAA, and FRA intoxication regulations. (See app. I.) We noted similarities and differences among the maritime, aviation, and railroad industries' regulations. The more significant differences were the following: (1) FAA has some requirements to obtain alcohol-related information that the Coast Guard does not collect during its license-screening process, while FRA is developing its licensing regulations. (2) All three agencies have established the same requirement for the maximum level of blood alcohol concentration allowable and prohibit

drinking while on duty. Among the three, FAA is the most restrictive and FRA the least regarding the time before work when drinking is allowed. (3) FRA has more testing rules than the Coast Guard, while FAA has fewer.

The Secretary of Transportation has announced that eliminating alcohol abusers from the transportation workplace is a priority. The Department, through the Federal Register rulemaking process, is exploring the need to adopt additional regulations for the transportation modes it regulates to prevent employees from performing sensitive safety- and security-related functions while under the influence of alcohol.

Conclusions

Despite concern about the extent of alcohol problems in the maritime industry, the Coast Guard does not know the magnitude of these problems. Also, because it does not maintain relevant statistics, even those on marine casualties specifically required by the Congress, it cannot measure the effectiveness of its efforts to prevent mariners with alcohol problems from serving on commercial vessels or evaluate how to better allocate its resources to reduce the number of alcohol-related accidents. Currently, the Coast Guard is revising its marine casualty information system to report alcohol-related casualty data.

Furthermore, although regulations permit investigative officers to test blood alcohol levels of the vessel crew if there is reasonable cause, very few such tests have been conducted in the marine industry in the past 2 years. The Coast Guard is not prepared to test because it has given a low priority to implementation of these regulations and because investigative officers do not have the training or equipment to test. In marked contrast, other transportation modes do conduct reasonable-cause tests.

The Secretary of Transportation has asked the Congress for authority to withhold the initial merchant mariner document to alcohol abusers and to obtain access to the National Driver Register to verify applicants' statements on convictions for driving while intoxicated and driving under the influence. While we agree that these efforts should help improve the documentation and licensing activity, we believe further improvements could be made if the Coast Guard would (1) avail itself of FBI checks for upgraded documents and license upgrades or renewals and (2) have its medical report forms specifically require information on alcohol use.

The Secretary of Transportation has also initiated, through the Federal Register rulemaking process, a review of the regulations for all transportation modes to prevent employees from performing sensitive functions while under the influence of alcohol. In comparing Coast Guard, FAA, and FRA intoxication regulations, we noted that differences exist among them. We did not assess—nor was it within the scope of the request to assess—whether current regulations for some modes are more successful in identifying and eliminating alcohol abusers in the respective industries. However, we believe that such a study would be useful to determine whether existing differences in procedures among the modes are reasonable or whether more effective results could be achieved by making the regulations more uniform.

Matters for Congressional Consideration

To assist the Coast Guard in carrying out its marine safety responsibilities, as regards its efforts to reduce alcohol-related accidents in the maritime industry, the Congress should consider granting the Coast Guard authority to withhold or revoke the initial merchant mariner document—the official paper needed to work on U.S. commercial vessels—from alcohol abusers and to obtain access to the National Driver Register to verify applicants' statements on alcohol-related convictions. H.R. 1465, presently in conference, contains provisions to attain these improvements in the Coast Guard.

Recommendations

We recommend that the Secretary of Transportation direct the Commandant of the U.S. Coast Guard to (1) improve procedures for identifying alcohol abusers in processing merchant mariner applications by requiring verification of all applications with the FBI and by asking for information on alcohol use on medical reports; (2) provide investigators with the necessary training and testing equipment so that they are prepared to enforce the intoxication regulations; and (3) improve management information and program effectiveness by collecting data on applications denied because of alcohol use, accidents in which alcohol was a contributing factor, violations of intoxication regulations, and results from reasonable-cause testing.

We also recommend that the Secretary of Transportation, in conjunction with the Department's rulemaking process for the prevention of alcohol abuse, determine whether existing differences in procedures among the transportation modes are reasonable or whether more effective results could be achieved by making the regulations more uniform.

Scope and Methodology

We conducted this review at Coast Guard headquarters in Washington, D.C., and at district offices in Boston, Massachusetts, and Portsmouth, Virginia; regional examination centers in Baltimore, Maryland, and New York, New York; and marine safety offices in Baltimore, New York City, Philadelphia, Pennsylvania, and Hampton Roads, Virginia. We reviewed laws, regulations, manuals, and other instructions pertinent to the Coast Guard's efforts to reduce the alcohol problem in the maritime industry. We interviewed district officials, examination and investigative officers, and marine safety program officials to identify procedures used for screening merchant mariner applicants and enforcing the intoxication regulations concerning alcohol use on board vessels, and to obtain statistics related to alcohol problems in the maritime industry. We also interviewed Administrative Law Judges, who are responsible for hearing all types of marine cases, in Washington, D.C., New York City, and Norfolk, Virginia, to discuss the availability of data on alcohol-related cases.

As you requested, we did not obtain official agency comments on a draft of this report. We did, however, discuss our findings with Coast Guard officials, who agreed with the facts presented. Our work was conducted between May 1989 and January 1990 in accordance with generally accepted government auditing standards.

As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of this letter. At that time we will send copies to the Secretary of Transportation; the Commandant, U.S. Coast Guard; and other interested parties. Copies will also be provided to others upon request. This work was done under the direction of Kenneth M. Mead, Director, Transportation Issues, (202) 275-1000. Other major contributors to this report are listed in appendix II.

Sincerely yours,

J. Dexter Peach
Assistant Comptroller General

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Abbreviations

DUI	Driving Under the Influence
DWI	Driving While Intoxicated
FAA	Federal Aviation Administration
FBI	Federal Bureau of Investigation
FRA	Federal Railroad Administration
NDR	National Driver Register

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Comparison of Alcohol-Related Regulations of the Maritime, Aviation, and Railroad Industries

Table I.1: Comparison of Steps in the Licensing Procedures of the Coast Guard, FAA, and FRA to Identify Alcohol Abusers

Licensing procedures	Coast Guard	Federal Aviation Administration	Federal Railroad Administration
Official working papers issued	All personnel: merchant mariner document, valid for life Officers' license, renewed every 5 years	Pilot: license, valid for life; medical certificate, valid after the month issued for 6 months, 1 year, or 2 years, depending on aircraft	No documents, licenses, or medical certificates are issued[a]
	Specialized staff:[a] certificate, valid for life	Air crew: license, valid for life; medical certificate, valid after the month issued for 1 year	
Denials, suspensions, or revocations	Document: may be denied only for evidence of drug use or controlled-substance violations, may be suspended or revoked for "cause," including violations of intoxication regulations License: may be denied for "character" or "habits of life," defined as including alcohol abuse, and may be suspended or revoked for cause	License: may be suspended or revoked for evidence of alcohol abuse Medical certificate: may be denied for evidence of alcohol abuse	
	Certificate: same as for license		
Alcohol information requested on forms	Application form for documents does not ask for alcohol data Application form for licenses and certificates asks for DWI and DUI convictions	Application form for licenses does not ask for alcohol data or DWI or DUI convictions[c]	
	Physical examination report form does not request alcohol information	Physical examination report asks for excessive alcohol use, DWI and DUI conviction data, and any information from examining doctor on alcohol abuse	
Information verification	FBI criminal checks[b] conducted for first application	FBI criminal checks not a part of the regular verification process	
	Seeking authority to access NDR[d] to verify driving records	Authority to access NDR recently obtained	

(continued)

Licensing procedures	Coast Guard	Federal Aviation Administration	Federal Railroad Administration
Other information	Seeking authority to deny the merchant mariner document to alcohol abusers	Considering a rule that would require pilots to report DWI or DUI convictions; the pilots would then have to reapply for a medical certificate within 60 days	

[1]FRA is drafting rules and regulations to establish licensing procedures, as required by the Rail Safety Improvement Act of 1988. FRA issued proposed rules on December 11, 1989.

[2]Specialized staff include doctors, nurses, and pursers.

[3]DWI: driving while intoxicated. DUI: driving under the influence.

[4]The Federal Bureau of Investigation (FBI), using finger print identification, checks its records for any arrests and convictions for misdemeanors and felonies. These records contain the FBI's own files, as well as criminal data from all local, state, and national law enforcement agencies.

[5]The National Driver Register (NDR) is a centralized data base of problem drivers and contains data from the states on traffic violations and convictions, including DWI and DUI convictions.

Table I.2: Comparison of Coast Guard, FAA, and FRA Regulations on Alcohol Use

Intoxication rules	Coast Guard	Federal Aviation Administration	Federal Railroad Administration
Definition of "intoxication"	Blood alcohol concentration of .04 for commercial mariners and .10 for recreational boaters	Blood alcohol concentration of .04	Blood alcohol concentration of .04
Restrictions on alcohol use	No drinking 4 hours before reporting for work	No drinking 8 hours before reporting for work	Individual cannot report to work intoxicated
	No drinking allowed on duty	No drinking allowed on duty	No drinking allowed on duty
Testing	Testing required only for serious accidents[1] and is authorized for "reasonable cause,"[2] testing directed by employer or the Coast Guard	No one at FAA can require testing; only a law enforcement officer is authorized to test an airman or direct that an airman be tested	Testing required after an accident and permitted for reasonable cause; testing directed by the employer
Penalties for violations	Depending on seriousness of the incident, penalties imposed may be a suspension or revocation of a mariner document, license, or certificate or a fine and/or imprisonment	May deny medical certificate or suspend or revoke license	Regulations do not provide for any penalties because of industry practices; for first violation, employer may offer a rehabilitation program; for second violation, employee is fired with no likely chance of being rehired

[1]Serious accidents include incidents such as loss of life, injury requiring medical aid, damage to property in excess of $100,000, and discharge of 10,000 gallons or more of oil or reportable quantities of hazardous materials into navigable waters.

[2]Reasonable cause for testing exists when a casualty and/or accident occurs, such as an accidental grounding of the vessel.

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